



# STATE OF IOWA

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IOWA UTILITIES BOARD  
IOWA DEPARTMENT OF COMMERCE

**Memo to:** Members of the General Assembly

**From:** The Iowa Utilities Board

**Date:** January 20, 2005

**Subject:** **Report on the Current Status of Local Telecommunications in Iowa**

Iowa Code chapter 476.29(15) directs the Iowa Utilities Board (IUB) to:

"Provide a written report to the general assembly no later than January 20, 2005, describing the current status of local telephone service in this state. The report shall include at a minimum the number of certificates of convenience issued, the number of current providers of local telephone service, and any other information deemed appropriate by the board."

In accordance with that directive we are providing to you this report on "The Current Status of Local Telecommunications in Iowa." Included in the report is the specific information required by the statute plus additional information that we thought would be helpful in your understanding of this subject. The Board, therefore, submits the following information for your consideration:

- (1) Empirical data
  - a. Certificates of convenience - 266
  - b. Current providers of local telephone service – A certificate of convenience does not necessarily mean the provider is currently providing service. It does mean that the company has filed a tariff and is ready to provide service. There are companies who have been granted certificates but are not providing service.
- (2) "Key Telecommunications Issues." This report was prepared for the Iowa congressional delegation in June 2004. It was updated for the Governor in October 2004 and further updated for the General Assembly in January 2005.
- (3) "Telecommunications Competition Survey for Retail Local Voice Services in Iowa." This report was prepared by the IUB in January 2004.
- (4) Iowa Utilities Board Order in Docket No. INU-04-1, Deregulation of Local Exchange Services in Competitive Markets.
- (5) Iowa Utilities Board 2004 Assessment of High-Speed Internet Access in Iowa.

Should you have questions or require further information, please contact our legislative liaison, Joan Conrad at 515.281.4874(o) or 515.229.4771(c).

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# Iowa Utilities Board

Key Telecommunications Issues  
Originally Issued June 2004  
Updated October 2004 and January 2005

## IUB Telecommunications Competition Survey

In January 2004 the **Iowa Utilities Board (IUB)** released its survey report on the extent of competition in local exchange services in Iowa as of July 1, 2003. A copy of the survey is attached. Below are several conclusions from this report.

- Most local exchange telephone customers in Iowa do not have a significant choice of providers (see chart below).
- Overall, the 161 incumbent local exchange carriers continue to maintain a significant portion of market share by generally not competing with one another; i.e., they serve their own separate service territories.
- Effective competition for local phone service (the choice of multiple comparable service providers) is emerging in a few areas of the state for some customer classes in certain exchanges.
- The growth of local exchange competition in Iowa will be affected by a variety of factors, including economic conditions, pending **Federal Communications Commission (FCC)** actions, federal court actions, and state and national elections.
- New technology may provide the necessary catalyst to spur future growth and competition.

2004 Competition Survey Findings			
Carrier	# of Communities/ Exchanges Served	Average Residential Market Share	Average Business Market Share
Qwest	200 communities 126 exchanges	90%	70%
Iowa Telecom	378 communities 296 exchanges	93%	81%
Frontier	49 communities 37 exchanges	100%	99%
Independents	419 communities	99%	99%
Municipals	17 communities	5 – 70%	5 – 70%
Competitive companies	Sporadically throughout 410 communities	8%	24%

### **IUB Deregulation Proceeding**

As a result of its 2004 Competition Survey, the IUB initiated a deregulation proceeding on its own motion. On November 23, 2004, the **Board issued an order deregulating the rates for local telephone service in 20 Iowa exchanges** where it found effective competition. The price of local telephone service in these exchanges will be set by the market, rather than by regulation. However, the Board will continue to regulate service quality in these exchanges and monitor the markets.

The Board found effective competition for local telephone services in the Armstrong, Coon Rapids, Delmar, Forest City, Harlan, Laurens, Lowden, Mapleton, Oxford, Oxford Junction, Primghar, Saint Ansgar, Solon, Spencer, Stacyville, Stanwood, Storm Lake, Tiffin, and Whiting exchanges. These are communities where at least one competitor provides service through its own wireline facilities and that competitor has captured a market share of more than 50 percent of both business and residential customers. The Board also found effective competition exists in the Council Bluffs market where multiple competitors are providing service, some using their own facilities. In each of these exchanges, customers now have a choice of providers for local telephone service, making traditional rate regulation unnecessary.

The Board will monitor the rates for local telephone service in these markets to ensure that the market remains competitive. Under Iowa law, the Board has authority to re-regulate rates if any of the competitors use anticompetitive practices to gain unfair market power or if the competitive situation changes. A copy of the order is attached.

The Board intends to follow this proceeding with a second phase in which it will consider other areas of competition provided by CLECs. This second phase may involve, among other things, the impact of emerging technologies and provider of last resort responsibilities. The Board may also consider 8 to 12 additional exchanges for deregulation that were brought up during Phase I. Finally, an inquiry into wireless substitution is being considered.

### **IUB Assessment of High-Speed Internet Access in Iowa**

In July 2004 the IUB completed its fourth statewide community-by-community assessment of Internet access in Iowa, an on-going effort to quantify the availability of high-speed Internet deployment. Telecommunications companies, cable providers, wireless providers, and satellite companies were included in the assessment. **The survey concludes that the deployment rate of high-speed technologies continues to increase, although at a slower rate.** One of the reasons for this may be that the remaining communities are harder or less profitable to reach. The figures below indicate the percentage of communities with access services over 200 kilobits per second (FCC standard). A copy of the assessment is attached.

Deployment of High Speed Internet Access	2001	2002	2003	2004
Rural communities <2,500 inhabitants	<b>27.8%</b> 246 of 879 communities	<b>47.0%</b> 431 of 917 communities	<b>67.8%</b> 634 of 935 communities	<b>72.6%</b> 679 of 935 communities
Non-rural communities	<b>41.7%</b> 111 of 266 communities	<b>60.9%</b> 167 of 274 communities	<b>67.5%</b> 185 of 274 communities	<b>72.9%</b> 199 of 273 communities

**NOTE:** These deployment rates mean high-speed access is available at some place(s) in a community; it does not mean all customers in the community can access high-speed services.

### **Universal Service Reform**

**Issue:** The federal **Universal Service Fund (USF)** was established to ensure that affordable telephone service is available throughout the United States. **It provides financial support to local telephone companies for high-cost customers** (typically, though not exclusively, in rural areas). Money to support this fund is obtained from customers as a percentage of the total amount a customer spends each month on interstate phone services, a surcharge that is currently 10.7 percent. The USF provides: (1) a high-cost support program for telecommunications service providers in areas where the cost per customer is much higher than the national average, (2) funding of telecommunications services for low-income consumers, (3) funding for schools and libraries for Internet access, and (4) funding for rural health care programs such as remote telemedicine diagnosis/procedures.

Currently, voice transmission services provided over the Internet are exempt from surcharges for federal USF programs. As customers migrate from traditional wireline voice services to those being provided over the Internet, assessable revenues from wireline customers will decrease. As the level of assessable revenues decreases, the level of contributions from each remaining wireline consumer must increase if USF program funding is to remain level.

Both the size of the Universal Service Fund and the potential for increased surcharges on customers' monthly bills have recently raised concerns in the telecommunications industry and many government agencies. The FCC, the Federal-State Joint Board on Universal Service, and numerous industry groups have begun to evaluate USF program offerings and seek solutions to limit the overall size of the fund while still fulfilling the goal of universal service.

**Effect on Iowa/Update:** In August 2004 the FCC's Federal-State Joint Board on Universal Service<sup>1</sup> (Iowa Utilities Board Member Elliott Smith was appointed in

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<sup>1</sup> On February 8, 1996, President Clinton signed into law the Telecommunication Act of 1996. This Act expanded the scope of the existing Universal Service provisions. The Federal-State Joint Board on Universal Service was established in March 1996, to make recommendations to implement the universal service provisions of the Act. This Joint Board is comprised of FCC Commissioners, State Utility Commissioners, and a consumer advocate representative.

November 2004 to serve as one of four state commissioners on the Joint Board) asked for comments on whether the FCC should change its policies regarding high-cost universal service funding for rural carriers. The Joint Board is also considering whether to revisit the definition for “rural telephone company” in the 1996 Telecommunications Act, specifically as it identifies carriers to qualify for high-cost support purposes. Currently, the Act’s definition provides four numeric tests, any one of which qualifies a carrier as a rural telephone company “that generally serve[s] fewer subscribers, serve[s] more sparsely populated areas, and generally do[es] not benefit as much from economies of scale and scope.” For example, any carrier that provides exchange service to a study area with fewer than 100,000 access lines qualifies. Although a carrier’s study area generally corresponds to its entire service territory within a state, for various reasons a carrier may have more than one study area per state.

The actual impact on Iowa under the different definitional tests is difficult to predict without obtaining additional information from local service providers regarding current individual company support levels. Quite often local service providers in the state consider such information proprietary because it contains access line counts, which is data that a competitor could find useful and advantageous.

Prior to any decision on major changes in universal service funding, **individual states should be given the opportunity to evaluate potential financial impacts.** In 2003 Iowa telecommunications providers received approximately \$88.2 million from federal universal service support programs. Based on total dollars disbursed in these programs, Iowa ranked 21 out of 56 states and territories receiving funding. Based on a May 2001 report by The National Regulatory Research Institute entitled *Striking a Balance: An Analysis of Inflows and Outflows for Universal Service Support in 56 Jurisdictions (1998-1999)*, Iowa’s ratio of disbursements received versus contributions made is 93 percent. Thus, Iowa is a net contributor to the federal fund, despite the rural character of the state.

### **Intercarrier Compensation**

**Issue:** Intercarrier compensation (ICC) establishes the rates between carriers for originating and terminating telephone calls. The original system was set up after the divestiture of the AT&T/Bell System telephone monopoly in 1984 and continued after the passage of the Telecommunications Act of 1996. Under the current system, compensation rates vary depending upon whether the call is interstate, intrastate, local, or bound for an Internet service provider. Using an interstate call as an example, if a Qwest local phone customer in Iowa places a call to a Verizon local phone customer in Virginia, the customer’s long distance carrier (MCI) must pay Qwest an originating fee and Verizon a terminating fee for the use of their networks.

As new technologies such as **Voice over Internet Protocol (VoIP)** emerge, the viability of traditional intercarrier long distance access fees and local service reciprocal compensation schemes is being questioned. VoIP uses digitized data packets to transmit voice over networks. This makes it difficult, if not impossible, to identify and measure the source of a telephone call using this technology. As a result, intercarrier

compensation for use of the local loop or for interexchange transport over the Public Switched Telephone Network cannot be measured by traditional phone companies, which transmit the VoIP calls over the Public Switched Telephone Network.

The FCC is currently reviewing whether VoIP should be regulated as a “telecommunications service” and thus subject to the rates for intercarrier compensation, or as an “information service” with no IC obligations. In April 2001 the FCC issued a Notice of Proposed Rulemaking (NPRM) seeking comments on reforming the ICC system by 2005. On May 5, 2004, the National Association of Regulatory Utility Commissioners (NARUC) Intercarrier Compensation Task Force, chaired by Iowa Utilities Board Member Elliott Smith, released a “Statement of Principles for a New Intercarrier Compensation System,” to be used by the various stakeholders and industry groups in evaluating their respective, diverse ICC proposals.

The FCC’s NPRM proposed replacing the current intercarrier compensation system with a “bill and keep” system known as Central Office Bill and Keep (COBAK). With COBAK the cost of using the local loop is recovered from local telephone customers and not from the calling party’s network. Proponents of COBAK state that it would: (1) eliminate battles over the type of call, (2) end the terminating access monopoly control of the local exchange carrier, and (3) end the implicit subsidy that exists currently when the total cost of carrying a long-distance call is averaged regardless of the actual costs incurred by the individual telephone company. Opponents predict that COBAK would result in large increases in end-user charges and local service rates, increase universal service support requirements, create opportunities for jurisdictional arbitrage, and not take into consideration the uniquely high costs of service for small rural carriers.

**Effect on Iowa/Update:** The National Telecommunications Cooperative Association (NTCA) estimates that a switch to bill and keep from the current access system would reduce annual access charges earned by rural incumbent local exchange carriers with less than 100,000 access lines by more than \$2 billion. NTCA states that would mean an average monthly loss of access charge revenues for rural **incumbent local exchange carrier (ILECs)** companies of \$22 per line with 10 percent of the study areas losing more than \$55 per line per month. About half of Iowa’s 150+ independent telephone companies serve less than 1,000 lines.

To date the NARUC ICC Task Force has held four workshops with a fifth scheduled for January 25 and 26 in Washington, D.C. There are a number of new intercarrier compensation proposals that have emerged from this group of 40+ telecommunications industry corporate and association stakeholders. They can be roughly described as a rural proposal, a facilities-based **competitive local exchange carrier (CLECs)** proposal, a larger carrier proposal (Iowa Telecom is a signatory to this), and a small and mid-sized company proposal. The goal of the Task Force is to consider and discuss the similarities and differences among the various groups’ proposals, seeking to narrow the field of intercarrier compensation-related issues as much as possible for the FCC. Time is short but some progress is being made. The outcome of this issue will have a profound impact on the future of the telecommunications industry in Iowa. The customers of many smaller companies will likely find it difficult to afford the significantly

increased costs for local service. As a result, the sale or merger of many of these local telephone companies could occur.

### **Triennial Review Order**

**Issue:** In August 2003 the FCC issued its **Triennial Review Order (TRO)**, which created new unbundling obligations for incumbent local exchange carriers allowing a CLEC to resell what it leases to provide service to customers. The FCC found that if three or more competitors are using their own switching facilities in a local market to compete with the incumbent, the incumbent is no longer required to offer unbundled switching in that market. Under the TRO, the FCC delegated to state commissions the authority to define the local markets and determine the existence and prominence of CLEC switching facilities.

In March 2004, however, the D.C. Circuit Court of Appeals found that the FCC erred in delegating authority over unbundling to state commissions. The FCC urged incumbents and competitors to hold "good-faith negotiations to arrive at commercially acceptable arrangements" to secure the future availability and pricing of unbundled network elements. Qwest, the largest incumbent serving Iowa, and a group of over 30 competitors from throughout the company's 14-state region held mediated talks in May to negotiate a replacement product for the unbundled network elements platform (UNE-P). Several of these negotiations are now complete; MCI is the highest profile competitor to finalize an agreement with Qwest. The IUB has approved the Qwest/MCI agreement.

On August 20, 2004, the FCC issued its interim TRO rules. On October 6, 2004, the D.C. Circuit responded to a petition for mandamus (of which Qwest was a party) that asked for the interim rules to be vacated. The court said it will "hold consideration" of the petition until at least January 4, 2005, to allow the FCC time to finish drafting and implementing final rules by year-end without action by the court.

On December 15, 2004, the FCC adopted new rules for network unbundling obligations of incumbent local phone carriers. These rules directly respond to the March 2004 decision by the U.S. Court of Appeals for the D.C. Circuit that overturned portions of the Commission's Unbundled Network Element rules in its Triennial Review Order. Although the written rules have not yet been released, the FCC has indicated the adopted rules relax the requirements that had required the four large Bell telephone companies to give their competitors access to their networks at discounted wholesale prices.

Some industry analysts predict the new rules may result in significantly higher local phone rates over the next year in many markets. The exact increases are not yet known, although Bell executives have indicated that they expect to raise wholesale rates for the use of pieces of their networks by 30 to 50 percent. Analysts see this decision, approved by the FCC's three Republican members over the dissents of two Democrats, as an important victory for the Bell companies and another in a series of setbacks for competitors like AT&T, MCI, and a group of smaller companies. Some of

the Bells, however, are unhappy with the FCC's selective phase-out of discounts. Bell companies claim significant price competition exists in providing service to customers, particularly from the cable industry. Critics of the commission's order predict it would drive most of the few remaining competitors of the Bell companies out of the local phone business.

**Effect on Iowa/Update:** As a result of the Court's overturning of the FCC's earlier unbundling rules, new interconnection agreements have been negotiated with significantly higher rates for network elements. These agreements, which can be adopted by other telecommunications companies, will make it more difficult for new entrants. Additionally, because these interconnection agreements were negotiated and approved by the Board following the D.C. Circuit Court of Appeals decision, but prior to the release of the FCC's final rules, it is not known if the companies will attempt to renegotiate these agreements based on a change of law provision in the current agreements. This may cause even greater increases in the cost of obtaining the unbundled network elements that CLECs use to provide service to their customers.

It is difficult to determine the overall effect of the FCC's new unbundling rules in Iowa because the written rules are not expected until sometime in February. In addition to the increase in prices, we understand the new rules will eliminate the requirement that incumbents sell certain high-capacity facilities to their competitors in some exchanges, with a 12-month transition period. This may affect carriers in at least one Iowa exchange, although it seems they should be able to make the necessary changes during the transition period.

### **Voice over Internet Protocol**

**Issue:** Voice over Internet Protocol (VoIP) is a relatively new broadband-based technology that transmits voice traffic in digital packets indistinguishable from data traffic. The FCC issued three orders during 2004 related to VoIP. First, it found entirely Internet-based VoIP to be an information service. Second, it ordered that interexchange service which undergoes no change in protocol is a telecommunications service. In its most recent ruling, the FCC found Vonage "Digital Voice" service is not subject to traditional telephone regulation. The FCC is currently reviewing the appropriate regulatory treatment of VoIP and has asked for comments on many Internet protocol issues including the proper classification of VoIP services, chiefly whether VoIP is a "telecommunications service" subject to regulatory oversight or an "information service" exempt from regulatory purview. Other issues include perceived state and federal jurisdictional responsibilities; the nature of new Internet protocol services, how they work, and what they stand to offer customers; and, the proper legal and regulatory framework. Comments are also being sought on related social obligations, such as the ability of those who are disabled to access the technology; emergency "911" dialing compatibility; law enforcement activities (CALEA: Communications Assistance for Law Enforcement Act of 1994); the impact on funding of universal service (described in more detail above under "Universal Service Reform"); the affect on number pooling and resource management; and, the degree to which traditional intercarrier access fee and reciprocal compensation standards are altered.



**Effect on Iowa/Update:** Within a week of the FCC action on Vonage, the company began offering service in and around Des Moines, followed closely by Cedar Rapids, Council Bluffs and Sioux City. Board staff found that McLeod is providing some numbering sources to Vonage. AT&T Call Vantage service, another VoIP service, is available in Council Bluffs. The Vonage ruling leaves to the states the responsibility to protect consumers from fraud, responding to complaints, and enforcing fair business practices. There are initiatives currently working through Congress that attempt to fully preempt state regulatory oversight of VoIP. Should either the Commission or Congress declare VoIP to be an interstate service or an information service, the technology would be placed beyond the reach of state regulators. This would effectively deregulate local exchange services that avail VoIP technology for their customers, leaving many Iowans with an unregulated service provider. Another issue in this instance would be that the federal government is picking winners and losers. Should Congress or the FCC choose to apply different degrees of regulation to the same services offered such as transmitting voice or data --- based only on the technology used to provide that service to the customer --- it could give an artificial competitive advantage to the less regulated service providers.

### **Local Number Portability/Thousand Block Number Pooling**

**Issue:** Local Number Portability (LNP) enables wireline or wireless telephone customers to change their telephone service providers without changing their telephone numbers. LNP capability requires switching hardware and software upgrades, which for smaller carriers can be costly to implement. Until recently only carriers in large metropolitan areas were required to implement LNP. But in November 2003, the FCC ordered the remaining carriers in the country to provide LNP by May 2004, unless the state commission suspended the FCC's requirement to deploy LNP.

The Board conducted two LNP suspension proceedings in 2004. The first involved Iowa Telecom, which requested a suspension of LNP in order to be consistent with its Network Improvement Plan, approved in another docket. Iowa Telecom serves approximately 290 exchanges in Iowa, and the Board suspended LNP, beyond 2004, for 63 of the exchanges. The 63 exchanges will require approximately \$13 million in network improvements in order to accommodate LNP. The Board allowed Iowa Telecom to deploy LNP in the 63 exchanges over the next three years.

The second LNP suspension proceeding involved 147 of Iowa's independent telephone companies. In deciding that case, the Board created five groups with different timeframes for deploying LNP. Each phone company was assigned to a specific group based on the record in the case. The result of the Board's decision is that most of the independent telephone companies will deploy LNP by April 2006.

A complement to LNP capability is **Thousands-Block Number Pooling (TBNP)** capability. TBNP allows carriers in the same exchange area to share already assigned blocks of telephone numbers. Without TBNP, when a carrier needs additional phone numbers, it must apply to the **North American Numbering Plan Administrator**

**(NANPA)** for a new central office code consisting of 10,000 phone numbers. TBNP delays the exhaust of existing area codes and conserves the inventory of phone numbers available for assignment by the NANPA. For a carrier to deploy TBNP, it first must deploy LNP. TBNP, however, must be ordered by the FCC, and currently most of the exchanges areas in Iowa are not mandatory areas for TBNP deployment.

**Effect on Iowa/Update:** Based on Iowa's current use of telephone numbers, the NANPA forecasts that none of Iowa's five area codes will exhaust before 2020. These forecasts, however, could change quickly as the telecommunications industry evolves. For example, Mediacom is preparing to provide VoIP telecommunications service in as many as 300 Iowa communities. This has the potential to impact NANPA's forecasts for area code exhausts, because Mediacom could require numerous central office codes in exchange areas without TBNP. If the forecasts for area code exhausts were to change dramatically, the Board could petition the FCC to expand TBNP in Iowa. State commissions in Oklahoma, West Virginia, and Nebraska have recently filed such petitions with the FCC.